

# United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

					•
APPLICATION NO.	FILING DATE	FIRST NAMED IN	NVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/625,516	07/24/2003	Bing-Yue	Bing-Yue Tsui		9031
7590 06/02/2004 TROXELL LAW OFFICE PLLC SUITE 1404 5205 LEESBURG PIKE FALLS CHURCH, VA 22041			*	EXAMINER	
		0		THOMPSON, CRAIG	
				ART UNIT	PAPER NUMBER
* ALLS CITOR	CH, VA 22041	*.	•	2813	•
	- 0,0	•	• • • • • •	DATE MAILED: 06/02/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	
Office Action Summary	10/625,516	TSUI ET AL.	
a most tous in Guinnary	Examiner	Art Unit	
The MAILING DATE of this	Craig A. Thompson	2813	
The MAILING DATE of this communication app	pears on the cover sheet with the	correspondence address	-
A SHORTENED STATUTORY PERIOD FOR REPL' THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period v  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be to within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from	imely filed  ays will be considered timely, m the mailing date of this communicati	on.
Status			
1) Responsive to communication(s) filed on 28 Ja	nuan/ 2004	*	
	action is non-final.		
3) Since this application is in condition for allowan	ice except for formal methans		
closed in accordance with the practice under E	x narte Quaylo 1035 C.D. 44	osecution as to the ments i	is
	A parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.	
Disposition of Claims		, 1	
4)⊠ Claim(s) <u>1-7</u> is/are pending in the application.			
4a) Of the above claim(s) is/are withdraw	n from consideration		
5)⊠ Claim(s) <u>1-7</u> is/are allowed.	· ·		
6) Claim(s) is/are rejected.	~.	•	
7) Claim(s) is/are objected to.		••	
8) Claim(s) are subject to restriction and/or	election requirement		
Application Papers	oreal requirement.		
	*		:
9) The specification is objected to by the Examiner.			
10)⊠ The drawing(s) filed on <u>24 July 2003</u> is/are: a)⊠	accepted or b)  objected to t	by the Examiner.	
Applicant may not request that any objection to the di	rawing(s) be held in abevance Sec	37 CED 1 05(a)	
Replacement drawing sheet(s) including the correction	n is required if the drawing(s) is ob	iested to See 27 OFD 4 4044	<del>d</del> ).
11)☐ The oath or declaration is objected to by the Exa	miner. Note the attached Office	Action or form PTO-152.	•
Priority under 35 U.S.C. § 119			
Sec.			
12) Acknowledgment is made of a claim for foreign p	mority under 35 U.S.C. § 119(a)	-(d) or (f).	
a) All b) Some * c) None of:			٠.
1. Certified copies of the priority documents	have been received.		,
2. Certified copies of the priority documents in the priority document	have been received in Application	on No	
=	y documents have been receive	d in this National Stage	
application from the International Bureau (	PCT Rule 17.2(a)).		
* See the attached detailed Office action for a list of	the certified copies not received	d.	
	ı		1)
Attachment(s)			
1) Notice of References Cited (PTO-892)			
2) Wotice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary ( Paper No(s)/Mail Dat	PTO-413)	
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	5) 🖳 Notice of Informal Pa	e tent Application (PTO-152)	
U.S. Patent and Trademark Office	6)  Other:		
D.S. Patent and Trademark Office PTOL-326 (Rev. 1-04) Office Actio	n Summary Bart	of Paner No /Mail Date 20040526	

Art Unit: 2813

### **DETAILED ACTION**

## Identical Claims in Pre-grant publication

The examiner notes that identical claims of claims 1-7 are presented as claims 11-17 of publication US 2003/0189226 (application no. 10/114,933). Because these claims were restricted and cancelled in that application, a double patenting rejection has not been applied. Because the inventive entity is identical to those of the current invention, this publication does not qualify as prior art for determining patentability.

## Information Disclosure Statement

The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

The examiner notes that the first two pages of the specification of the current invention list nine non-patent literature references (listed as "references cited"). There is not an IDS in the application and these references are not readily available to the examiner. Accordingly, the specification must either be amended, or a proper submission of an IDS and those references should be provided.

Art Unit: 2813

## Allowable Subject Matter

Claims 1-7 are allowed. The following is an examiner's statement of reasons for allowance: prior art of record does not describe or suggest applicants' invention set forth in claims 1-7, a method for fabricating (a) MOSFET, modifying (the) Schottky barrier, and diminishing Carrier Injection Resistance wherein a silicon on insulator device is provided, a MOS is formed on the SOI device, a metal layer is formed on the SOI device and the MOS, and the silicon layer is reacted to dorm a metal silicide layer by a metal self-aligned process, in the context of the recited process. The examiner notes that while process steps (such as the use of a metal self-aligned process) are often not given patentable weight in a device (or product-by-process) claim, they are properly afforded patentable weight in a straightforward process claim, such as those of the current invention.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### Cited Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Xiang (US Patent No. 6,440,806) teaches a method for producing metal-containing semiconductor compound regions (abstract and title) including a metal silicide layer and ion implantation (figure 5, 120 and columns 2-3).

Art Unit: 2813

Streetman (text, pages 351 and 352) teaches an SOI device with an substrate (Si) and insulation layer (SiO<sub>2</sub>) and a silicon layer on top.

#### Conclusion

This application is in condition for allowance except for the following formal matters:

The listing of references cited in the specification is not proper because those references are not of record and have not been considered.

Prosecution on the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO**MONTHS from the mailing date of this letter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Craig A. Thompson whose telephone number is (571)272-1699. The examiner can normally be reached on Monday-Friday 8:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Whitehead, Jr. can be reached on (571)272-1702. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number: 10/625,516

Art Unit: 2813

Page 5

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

31 May 2004

CRAIG A. THOMPSON

CRAIG A. THOMPSON PRIMARY EXAMINER